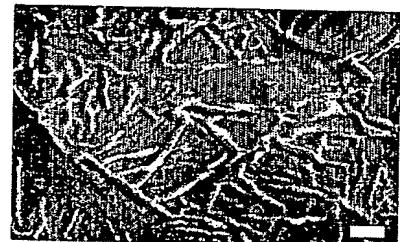
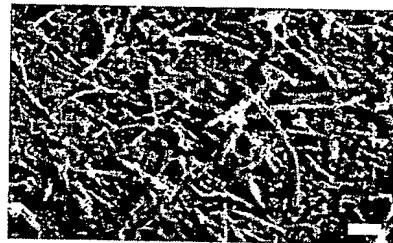


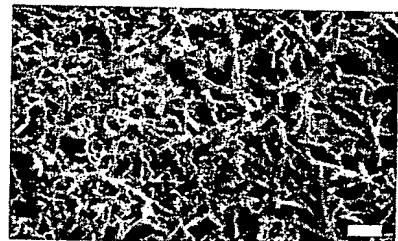
(a) 100:0 (PU:CN wt. %)



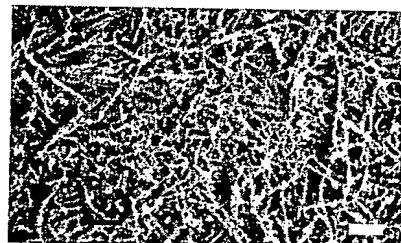
(b) 98:2 (PU:CN wt. %)



(c) 90:10 (PU:CN wt. %)

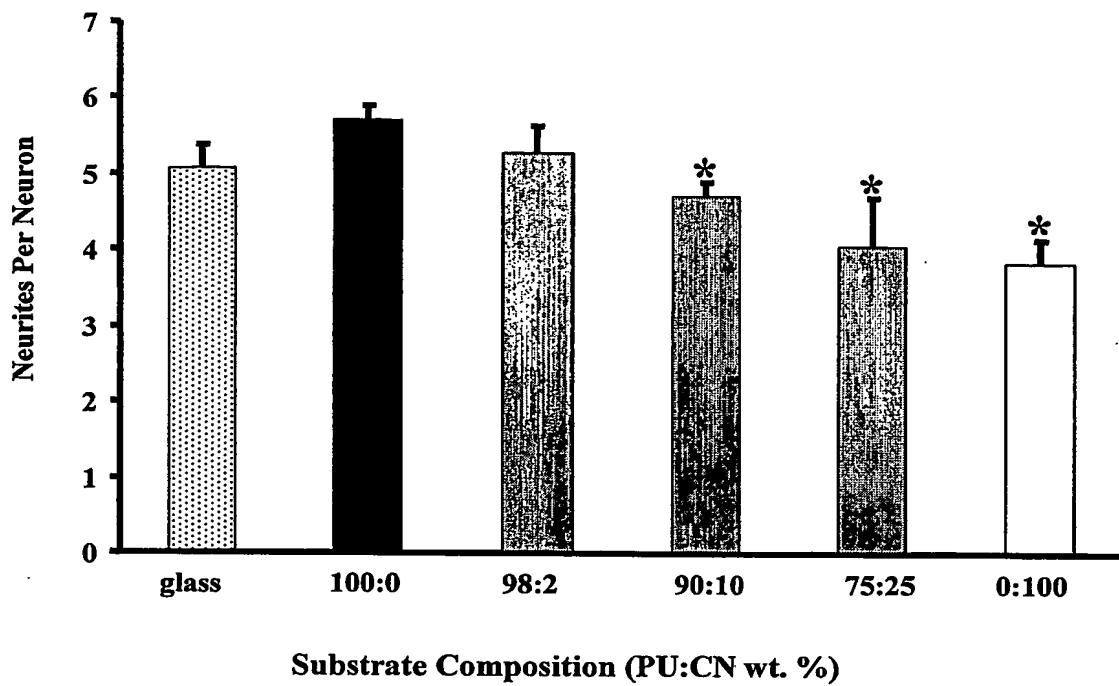


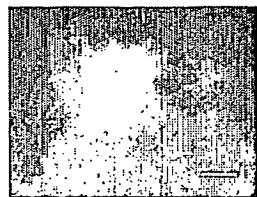
(d) 75:25 (PU:CN wt. %)



(e) 0:100 (PU:CN wt. %)

FIG. 1

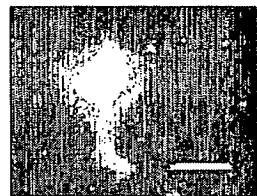
**FIG. 2**



a) 100:0 (PU:CN wt. %)*



(b) 98:2 (PU:CN wt. %)*



(c) 90:10 (PU:CN wt. %)**

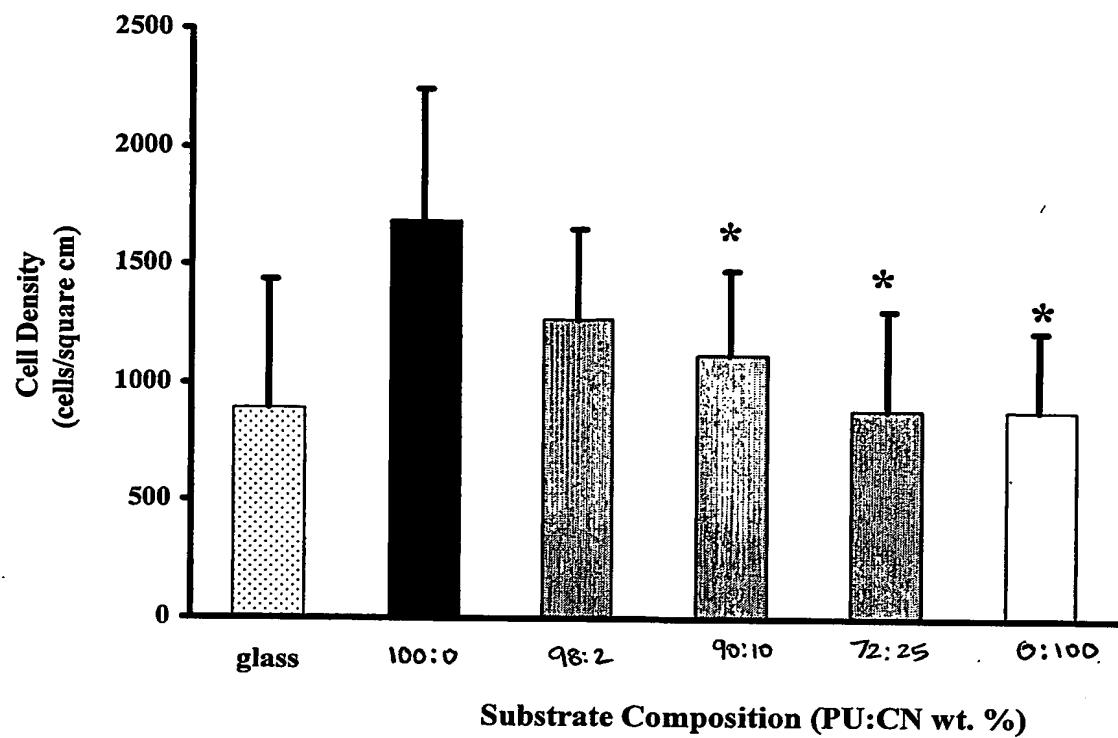


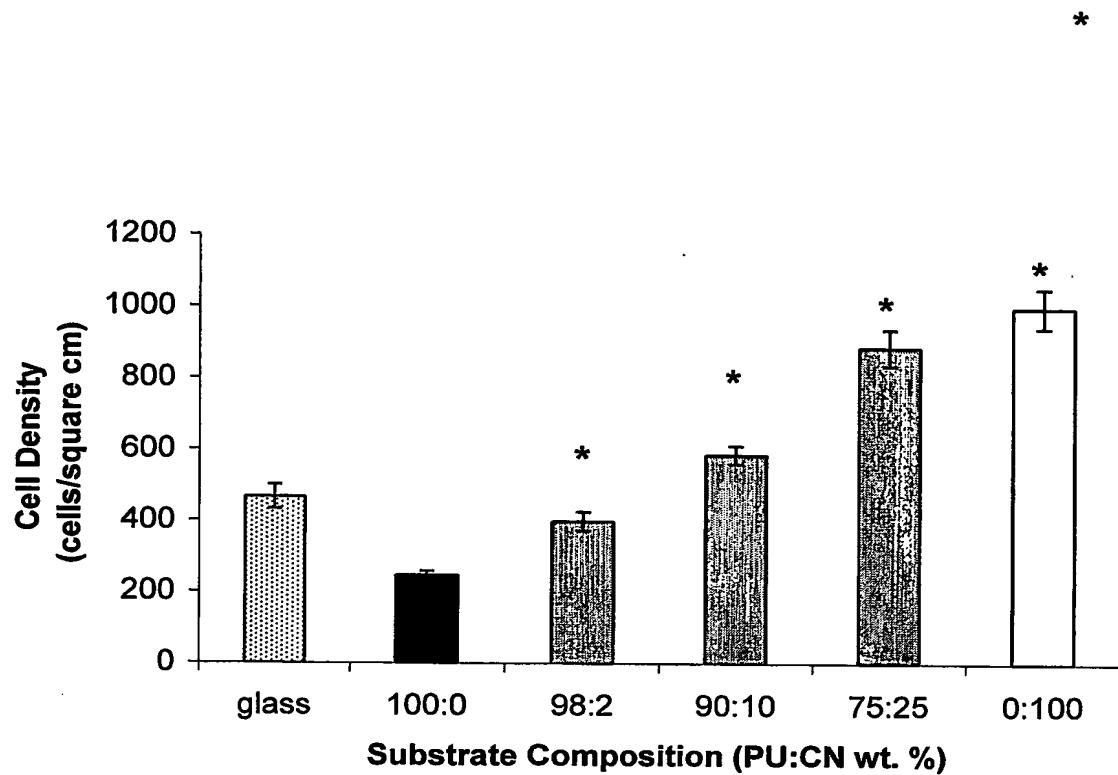
(d) 75:25 (PU:CN wt. %)**



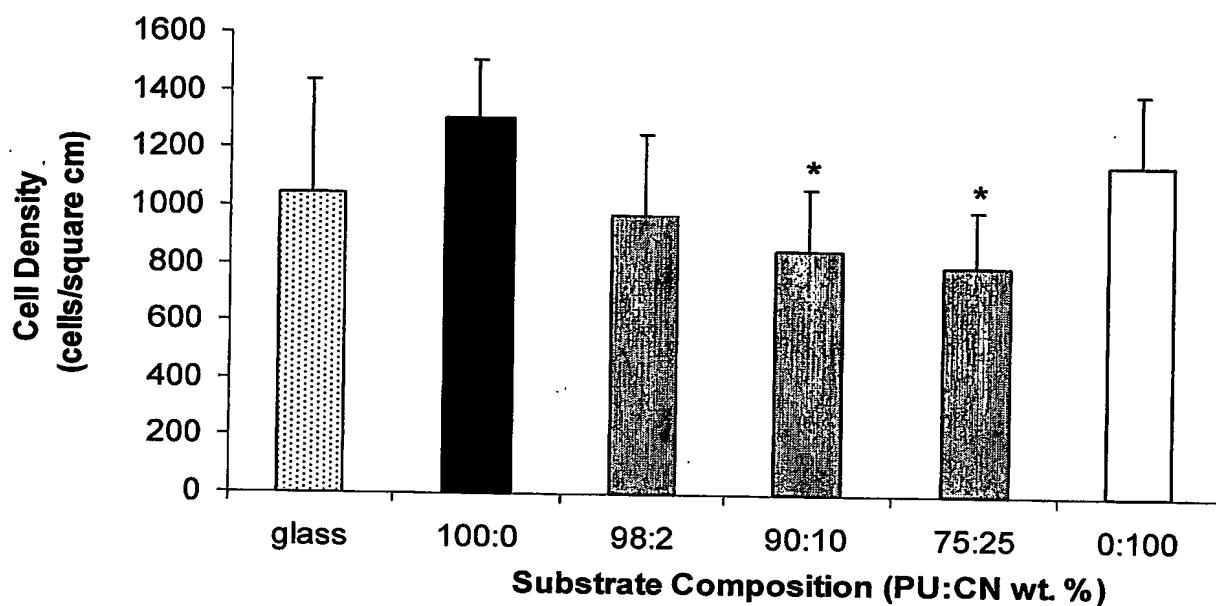
(e) 0:100 (PU:CN wt. %)*

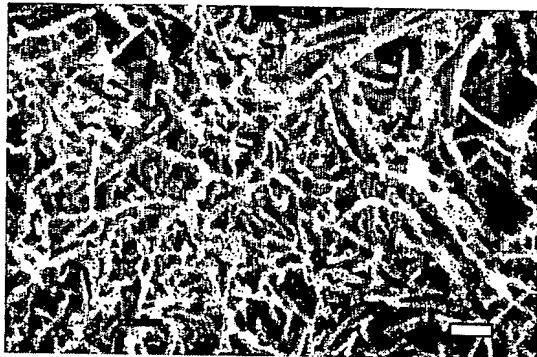
FIG. 3

**FIG. 4**

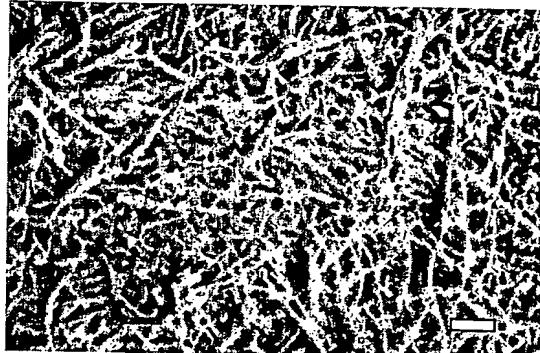
**FIG. 5**

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**FIG. 6**



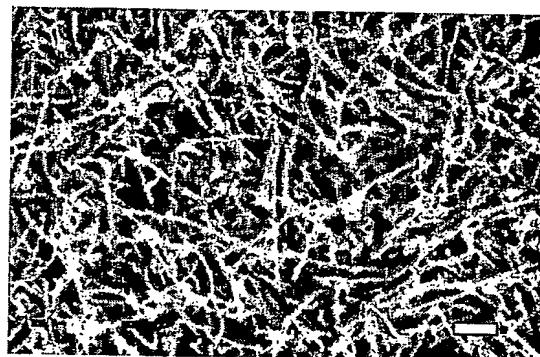
(a) Conventional (200 nm) with a low surface energy



(b) Conventional (200 nm) with a low surface energy



(c) Nanophase (100 nm) with a low surface energy

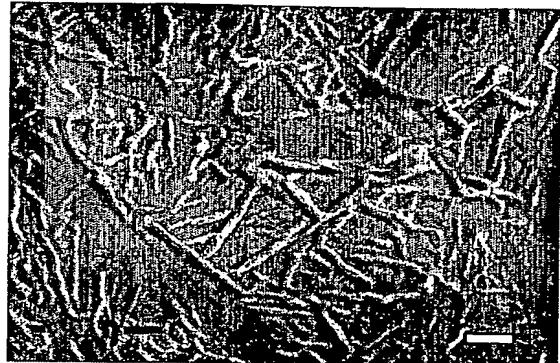


(d) Nanophase (60 nm) with high surface energy

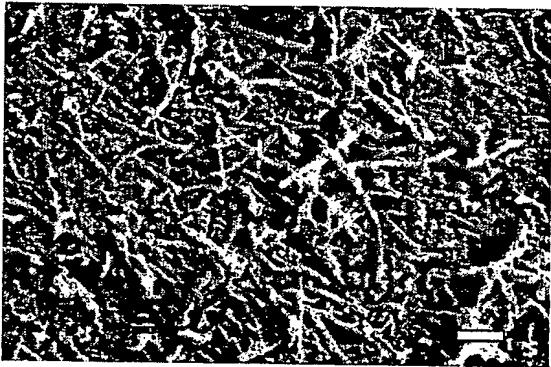
FIG. 7



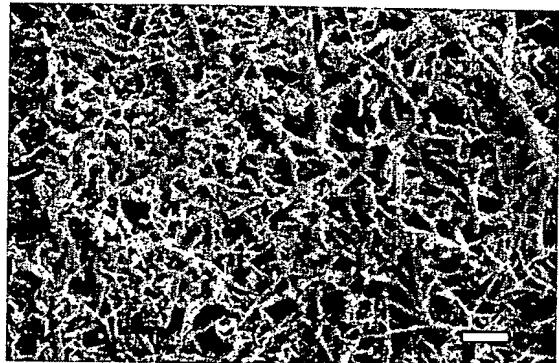
(a) Composition is 100:0 (PCU:CN) wt. %



(b) Composition is 98:2 (PCU:CN) wt. %

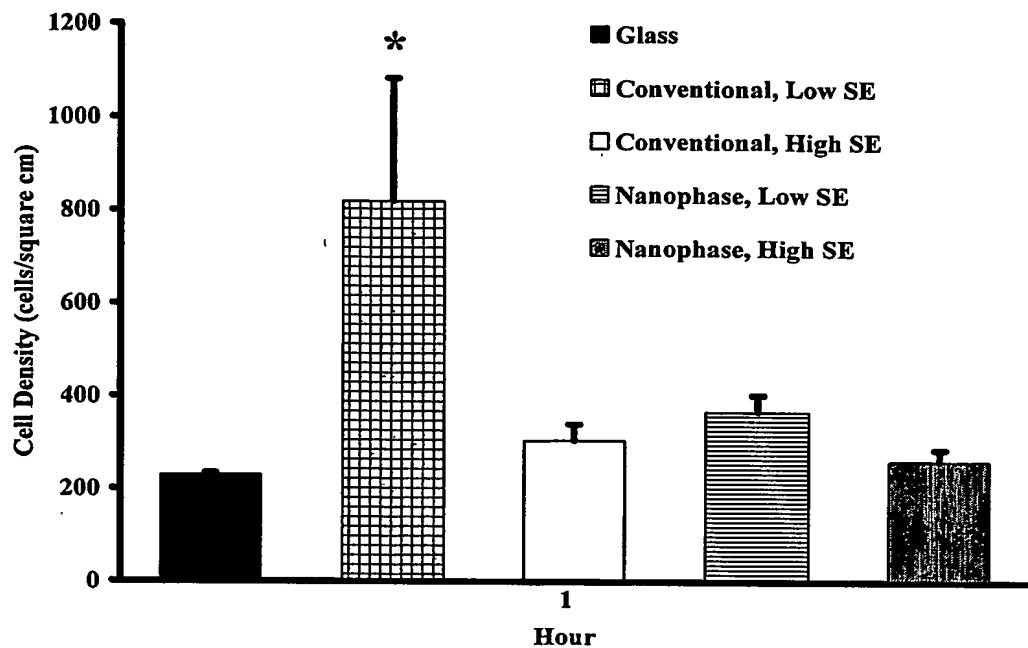


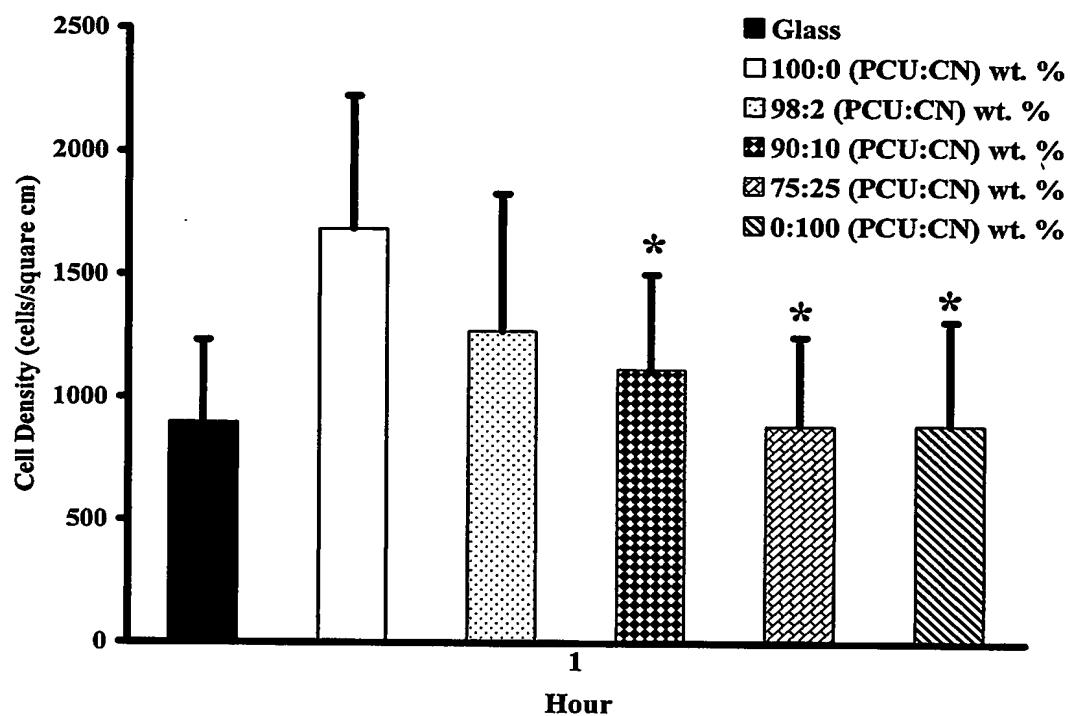
(c) Composition is 90:10 (PCU:CN) wt. %



(d) Composition is 75:25 (PCU:CN) wt. %

FIG. 8

**FIG. 9**

**FIG. 10**

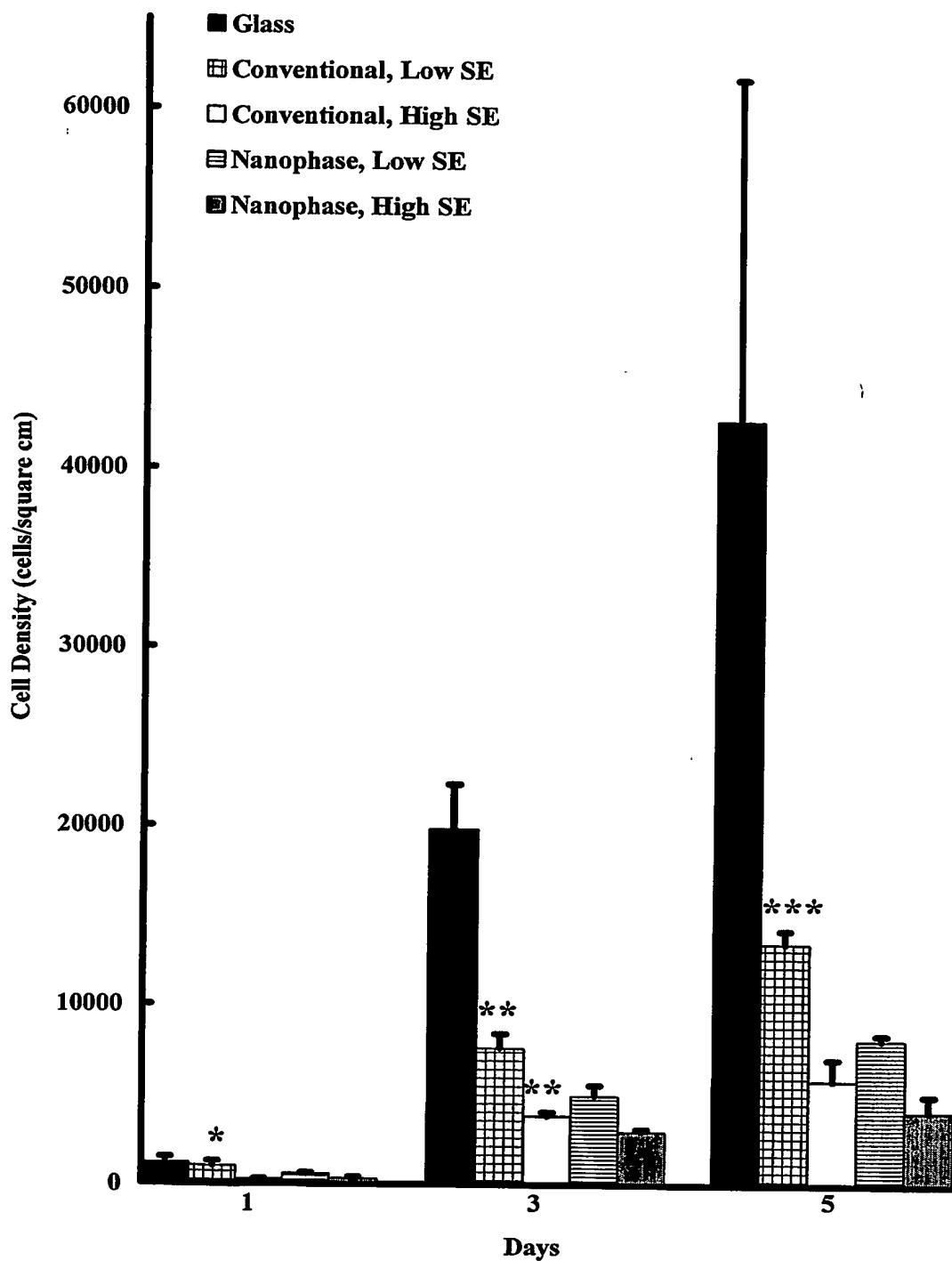
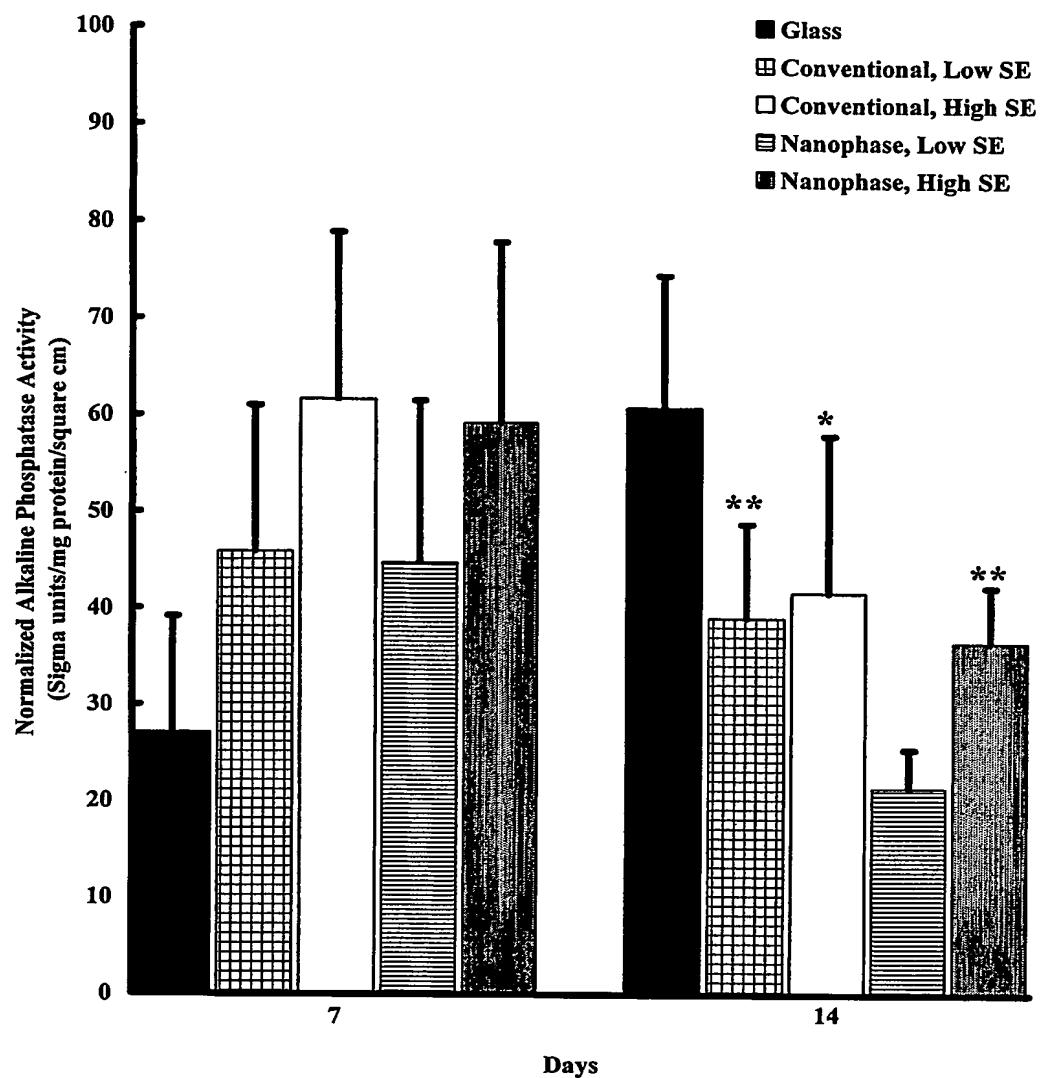
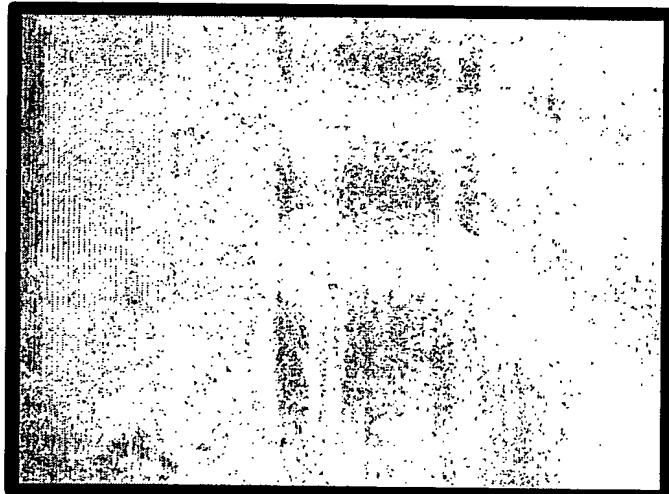


FIG. 11

**FIG. 12**



High surface energy carbon nanofibers in polymer without an applied electric field



High surface energy carbon nanofibers in polymer with an applied electric field

FIG. 13